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(54) Title: **PULSE MODULATED POWER CONVERTER**

(57) Abstract: A pulse modulation power converter comprising a forward path including a forward block (15), a switching stage (11) for amplifying an output from the forward block, and an output filter (12) for low pass filtering an output signal from the switching stage, a global feedback path (13), connected to the low pass filtered output signal, comprising a global feedback block (18, 19) for generating a feedback signal, and means (14) for subtracting said feedback signal from an input signal, and feeding the result to said forward path. The global feedback block and/or forward block includes means for compensating at least a portion of a phase lag of said output filter, and means for obtaining a 180 degrees phase lag at a switching frequency, thereby achieving conditions for a controlled oscillation at said switching frequency. The control system combines the advantages of the self-oscillation technology with a high gain, wide-band control loop for suppressing non-linearities. This will lead to a better performing system in terms of total harmonic distortion and noise.

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